

CA

22.

Catalytic desulfurization of shale and petroleum gasoline. B. I. Kazakov, N. G. Bublyshina and A. F. Chugayev. *Zhurn. nauch.-tekhn. issledovaniy po khimii i tekhnologii naftы i gaza*, No. 1, 1946, 1021 p. (in Russian).—Shale gasoline contg. 12% S (in the form of thiophene and its homologs) can be desulfurized to 5% in one run, to 1% in two runs, over a Ural bauxite contact mass at a rate  $r = 1$  vol. gasoline/vol. contact mass/hr. In contrast to various other bauxites, titanomagnetite, apatite, ilmenite, pyrolysite, and chromite contact masses which showed a poor efficiency, two brown iron ores proved suitable: Khalilov ore,  $\text{Fe}_2\text{O}_3$  46,  $\text{Al}_2\text{O}_3$  8,  $\text{CaO}$  0.9,  $\text{MnO}$  9,  $\text{Cr}$  2.2,  $\text{SiO}_2$  12,  $\text{P}_2\text{O}_5$  2%; and Karel' ore, 57, 11, 1.9, 10, 1.0, 10.5, 1.9%. The ores, ground to 2-3 mm grain size, were reduced at 300° for 2-3 hrs., in a total of 701.11 (per 250 cc. v/c. 0%). In desulfurization at 500°, at  $r = 0.5$  (75 cc. gasoline for 250 cc. catalyst), the S content was reduced from 12 to 2.3% in one cycle. These catalysts can be further improved by activation with an addn. of 2% Mn or Mg in the form of acetate solns., drying at 120°, and reduction in  $\text{H}_2$ . Runs with the promoted catalysts on petroleum gasoline artificially sulfurized by addn. of thiophene,  $\text{CH}_2\text{S}$  (to 10% S),  $\text{C}_6\text{H}_5\text{S}$  (to 5% S), and  $(\text{CH}_3)_2\text{S}$  (to 5% S), at  $r = 0.5$ , at 300, 400, 450°, resulted in the final S contents:  $\text{C}_6\text{H}_5\text{S}$ , 0.2, 0.0, 0.2%;  $\text{CH}_2\text{S}$  1.6, 0.0, 1.1%;  $(\text{CH}_3)_2\text{S}$  0.9, 0.2, 0.07%. Naturally S-contg. shale gasolines, at 450°, were desulfurized: at  $r = 0.5$ , from 1.4 to 0.1 and from 12.2 to 0.6%; at  $r = 0.3$ , from 0.0 to 0.2 and from 3.6 to 0.3%; at 400°,  $r = 0.5$ , straight-run gasoline, from 0.8 to 0.02%; cracked gasoline, from 0.0 to 0.1%.

More prolonged reduction of the catalyst results in higher activity, e.g., 2 and 3 hrs., S brought down from 12 to 3 and 0.67%; further prolonged reduction is without further effect. In terms of temp., 300, 400, 450°,  $r = 0.3$ , the 12.2% S shale gasoline was brought down to 0.2, 0.8, 0.8, 0.7%; S, the limit, is consequently practically attained at 450°. Increased rate results in lower final desulfurization, e.g., in the same shale gasoline,  $r = 0.1, 0.2, 0.3, 0.4, 0.5$ , final S 0.25, 0.48, 0.8, 1.0, 2.3%. Poisoning of the catalyst occurs after passing 1.0 weight of gasoline per 1 weight of catalyst, or 0.75 vol. per 1 vol.; regeneration is achieved with superheated steam, followed by an air stream of 300° for 2 hrs., and renewed reduction; loss of activity after 1, 3, 10 regenerations, is 16, 30, 60%. Desulfurized shale gasoline shows a higher content of low-boiling fractions than the original material and has an octane no. 82. Crude shale gasoline is desulfurized farther than the same gasoline previously  $\text{H}_2\text{SO}_4$ -purified (to 0.9 and 3.3% S, resp.); in the former case, the reaction is accompanied by abundant evolution of gas (contg.  $\text{H}_2$ ), which evidently promotes the desulfurization; intentional admixt. of  $\text{H}_2$  to purified gasoline permits improving its desulfurization to a residual 1.8%; the  $\text{H}_2$  forming during the reaction is consequently more efficient than if added artificially. Petroleum-cracking gasoline, b. 60-150, S 0.87%, 450°.

## APPENDIX METALLURGICAL LITERATURE CLASSIFICATION

ECONOMIC CLASSIFICATION	INDUSTRIAL CLASSIFICATION	SUBCLASSIFICATION	ECONOMIC INDUSTRY											
			1	2	3	4	5	6	7	8	9	10	11	12
100000	1													
D M W AV	10	25												

v 0.6, total run 9 weight/l. weight catalyst, resulted in 0.07% H<sub>2</sub> yield in gasoline 80%; gas evolved 300 l./l. gasoline, rich in H<sub>2</sub> (over 80%); the fractional component is not essentially changed; with 3 cc. Pb(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>, the octane no. before and after desulfurization is 73 and 82. In reforming gasoline, b. 60-150°, S 0.28%, all S is removed at 230°, v = 1, with yields of 93%; regeneration is only necessary after passing 10 vol. gasoline per 1 vol. contact. As a result of desulfurization, aromatic content increases from 20 to 27%; unsatd. hydrocarbons decrease from 10% to 42%; octane no. with 3 cc. Pb(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>/gal. rises from 81 to 87. Straight-run gasoline, b. 60-180°, S 0.50, can be completely desulfurized at v 0.6 even with nonreduced catalysts; lifetime is 10 vol. gasoline/1 vol. contact.

N. Then

EDELSHTEYN, N. G.

3

USSR •

v. Hydrocarbons, asphaltenes, and resins removable by  
acid gel in generator tar from Estonian shale. N. G.  
Edelesh'teyn, V. M. Goryainov, I. V. Kudryavtsev,  
Voprosy Khim. i Tekhnologii Nafta, No. 3, p. 17, 1954. Various fractions were sep-  
arated into asphaltic, resinous, phenolic, and organic  
tar which could be removed from lignite soils by acid gel. The  
hydrocarbons constituting about 30% of the total, consisted  
mainly of aromatic cyclic compounds; almost no paraffins were  
found. Cyclohexane and cyclohexene were found in the  
asphaltic fraction. The asphaltene content of tar was low,  
and the resin and phenol contents were high. O is present  
in tar in the forms of CO and COOH groups in the asphalt-  
enes, and resins, which have mostly cyclic structures with 3-4  
rings per mol. Asphaltenes and resins differ in composition  
and in their functional groups, but on exhaustive hydrogenation  
produce compounds of similar structure and mol. wts.

W. M. Sternberg

EDEL'SHTEYN, N. G.

4

USSR

Unsaturated hydrocarbons in the gasolines from sapro-

polic fats. N. G. Edel'stein. Trudy Inst. Gornoj

Izdatel'stvo Akad. Nauk U.S.S.R. 3, 120-3 (1954).—Diene

hydrocarbons were found to be present in all the fractions of

the gasolines, but their concn. was higher in the lower distn.

range, reaching 8-8% in the lowest-boiling fraction.

W. M. Sternberg

201

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000412010003-0

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R000412010003-0"

5(1)

AUTHORS: Faynberg, Ye. D., Edel'shteyn, O. Ye. SOV/64-59-2-6/23

TITLE: On the Ways of Utilizing Fluorine-containing Waste Gases of the Phosphorus Fertilizer Industry (O putyakh ispol'zovaniya otkhodyashchikh ftorgazov fosformotukovoy promyshlennosti)

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 2, pp 116-123 (USSR)

ABSTRACT: The utilization of fluorine-containing gases which are obtained in the production of superphosphate is much more developed in the USSR than in the western countries. In this connection sodium fluosilicate (I) is produced. Owing to a reduced demand of (I) the preparation of (I) to sodium fluoride (II) (70-75% NaF) was started in 1956-1957 at the Odessa, Vinnitsa and Voskresensk Superphosphate Works. Since the utilization of (II) is equally limited, some information concerning this subject is given by mentioning the following investigations: investigations are carried out in 1956 at the Gosudarstvennyy institut stekla (State Institute of Glass) point to a possibility of applying (I) in glass melting. At present, however, (I) is used only in two glass works ("Krasnyy Oktyabr'" and Bytosh'). The efficiency of (I) in ore flotation was found at the Uralmekhanobr', and Krasnoural'skiy medeplavil'nyy zavod (Krasnoural'sk Copper-melting Works), while work at the Giredmet

Card 1/6

On the Ways of Utilizing Fluorine-containing Waste Gases      SOV/64-59-2-6/23  
of the Phosphorus Fertilizer Industry

deals with the application of (I) in extracting rare metals. Experimental investigations at the NIItsement, Giprotsement, and the Leningradskiy khimiko-tehnologicheskiy institut (Leningrad Chemico-technological Institute) prove the efficiency of (I) as a setting agent in the formation of cement. A series of research work was carried out on the production of other fluosilicates, salts for aluminum industry, as well as of (II) and potassium fluoride (III) from fluorine-containing waste gases of the phosphorus fertilizer industry. At the Institut biologii Ural'skogo filiala Akademii nauk SSSR (Institute of Biology of the Ural Branch of the Academy of Sciences of the USSR) positive results were obtained by applying ammonium fluosilicate (IV) as an antiseptic. Experiments made at the Institut novykh stroymaterialov Akademii nauk stroytel'stva i arkhitektury SSSR (Institute for New Building Materials of the Academy of Sciences of Building and Architecture of the USSR), as well as investigations carried out at the VNIIasbotsement showed the possibility of applying magnesium- and zinc- fluosilicate (V) and (VI) as agents for the treatment with fluosilicate. The possibility of producing (IV),(V),(VI), copper- and iron fluosilicate (VII) and (VIII) by neutralizing fluosilicic

Card 2/6

On the Ways of Utilizing Fluorine-containing Waste Gases      SOV/64-59-2-6/23  
of the Phosphorus Fertilizer Industry

acid (FSA) with the corresponding reagents was found in 1947-1949 at the UNIKhim and tested on a semi-industrial scale (for (IV)) at the Vinnitsa works in 1951. Experiments concerning the production of (IV) were made also at the NIUIF, 1957-1958. At the Rizhskiy superfosfatnyy zavod (Riga Superphosphate Works) the (I)-production was adapted to the production of (IV). In 1939-1940 laboratory investigations were made at the GIPKh for the production of aluminum fluoride (IX) according to the ammonia method; the problem of producing (IX), however, was solved at the UNIKhim in 1953-1954 and the Krasnoural'skiy superfosfatnyy zavod (Krasnoural'sk Superphosphate Works) in 1957-1958 after a reaction of (FSA) with aluminum hydroxide. Cryolite (X) was produced from waste gases according to 3 methods: carbonization-, ammonia- and UNIKhim-method. Investigations dealing with the first method were carried out at the VAMI (1935-1939) and the NIUIF (1951-1955), as well as until 1941 (by roasting (I)) at the Dnepropetrovskiy alyuminiyevyy zavod (Dnepropetrovsk Aluminum Works). The second method was tested at the laboratories of the GIPKh, experiments, however, are not yet finished. The best of these three methods is that devised by the UNIKhim (1953-1954), which was tested at the

Card 3/6

On the Ways of Utilizing Fluorine-containing Waste Gases of SOV/64-59-2-6/23  
the Phosphorus Fertilizer Industry

Krasnouralsk Works on a semi-industrial scale and completed and applied on industrial scale at the Odessa works. It is based on the reaction of the aluminum fluoride solution with (II). The production of high-per-cent calcium fluoride (XI) was tested according to a reaction scheme by A. G. Pavlovich at the NIIOkhim in 1955, and according to the ammonia method at the NIUIF in 1957. Both methods, however, are rather complicated. At the NIUIF a method of producing low-per-cent (XI) was devised. This method should be applied at the Sumskiy superfosfatnyy zavod (Sumy Superphosphate Works) since its waste gases have the necessary composition. The dissociation method tested by the NIUIF on a semi-industrial scale at the zavod im. Vcykova (Works imeni Vcykova) in 1949-1951 was the first method to be applied in the production of (II) from (I) in the USSR. In 1950-1954, the thermal soda method was introduced at the department of the works which is now shut down. Since the production of (II) by these works has been stopped. (II) is produced by the Vinitsa, Odessa, and Voskresensk works according to the suspension method devised by the NIUIF. Experiments concerning mechanical enrichment of dry (II) at the VKhK proved unsuccessful. Experiments were made at the UNIKhim

Card 4/6

On the Ways of Utilizing Fluorine-containing Waste Gases    SOV/64-59-2-6/23  
of the Phosphorus Fertilizer Industry

in 1938-1939 and at the Polevskoy kriolitovyy zavod (Polevskoy Cryolite Works), in 1952, which dealt with the purification of (II), without being introduced into practice. At the UNIKhim (1934-36), VKhK (1952-53) and at the Odessa Works in the course of the last years the so-called caustic method of enrichment of (II) was tested. In the last years experiments were also made at the UNIKhim and the Odessa Works concerning the separation of the (II)-suspension by means of a "hydrocyclone". Experiments of salting out (II) from the solution were made at the NIUIF in 1953, while the ammonia method for producting (II) was tested at the GIPKh in 1936-41. The potash method is regarded as the most expedient method for producting (II), it was devised by the NIUIF and the NIIkhp MMP RSFSR and examined in 1949-1952 in the laboratory, in 1953 on industrial scale at the Armavirskiy zavod MMP RSFSR (Armavir Works MMP RSFSR) and semi-industrially at the NIUIF test plant in 1955. According to the above explanations the preparation of fluorine-containing gases of the phosphorus fertilizer industry into salt for the aluminum industry is possible. As to the utilization of kieselguhr, reference is made to investigations carried out at the Voskresenskiy khimicheskiy Kombinat (Voskresensk Chemical Kombinat)

Card 5/6

On the Ways of Utilizing Fluorine-containing Waste Gases      SOV/64-59-2-6/23  
of the Phosphorus Fertilizer Industry

in 1957-1958, where a product called "belaks" was obtained which may be used instead of the expensive "white carbon black". The production was taken up at the khimkombinat Maardu (Chemical Kombinat Maardu). There are 4 references.

Card 6/6

VOLOVICH, N.I.; KRASOVITSAYA, A.M.; MIKULINSKAYA, R.M.; ZLATOPOL'SKAYA, R.D.;  
~~KON'ZETSKYI, B.I.~~; SAVITSKAYA, E.K.; PARKHOMENKO, L.I.; PERKACH, V.S.,  
professor, direktor; ZIMINA, O.I.; SOKOLOV, G.S.; ISTOMINA, I.D.;  
GORDIYENKO, Ye.G.; KLYUCHNIKOVA, L.Sht.; NADTOKA, V.L.; KOCHINA, V.N.;  
AVTONOMOVA, L.V.; BIRKUB, L.G.; GOL'DENBERG, R.A.; BELAYA, O.S.;  
SAVCHENKO, A.M.

Study of efficacy of the enteral immunization against dysentery. Authors'  
abstract. Zhur.mikrobiol.epid.i immun. no.8:27 Ag '53. (MLRA 6:11)

1. Ukrainskiy institut epidemiologii i mikrobiologii im. I.I.Mechnikova v  
Khar'kove. (Dysentery)

IWLIEV, I.V.; PETRUKHNOVSKIY, I.V. retsenzent ; KRIMNUS, G.Kh.  
retsenzent ; NAUMOV, G.I. retsenzent ; ORLOV, V.N.  
retsenzent ; TUCHKEVICH, T.M. retsenzent ; USHAKOV, P.S.  
retsenzent ; CHERNUKHA, N.T. retsenzent ; EDEL'SHTEIN,  
P.G. retsenzent ; KRISHTAL', L.I., red.; VENNICHENKO, N.G.,  
kand. ekon. nauk, red.; USENKO, L.A., tekhn.red.

[Finance and the financing of railroad transportation] Fi-  
nansy i finansirovanie zheleznodorozhnogo transporta. Mo-  
skva, Transzhelizdat, 1963. 439 p. (MIRA 17:2)

EDEEL'SHTEYN, S. A.

62/49T31

USER/Engineering

Jul 49

Boiler  
Water Purification

Determination of Excess Phosphates in Boiler  
Water Employing Cationization, S. A.  
Edeel'shteyn, V. I. Petatskiy, GES-4, Khar'kov  
Power System, 2 pp

"Zavod Lab" No 7

Shows deficiencies in usual laboratory methods  
of determining phosphate content (important for  
establishing correct water conditions for boilers)  
since ions of  $\text{PO}_4$  are not taken into account  
if the colored phosphomolybdate complex occurs

62/49T31

USER/Engineering (Contd)

Jul 49

In a strongly acid medium in which phosphate  
sediment dissolves easily. Notes drawbacks  
of method proposed in 1945. Authors solved  
problem by using cation solutions. Tabulates  
results of tests on several boilers.

62/49T31

EDELSHTEYN, S. A.

PROCESSES AND PROPERTIES INDEX

5017. DETERMINATION OF EXCESS OF PHOSPHATES IN BOILER WATER BY  
USING CATION EXCHANGE AGENTS. Edelshtein, S. A. and Petatki, V. I.  
(Zavodskaya Lab. (Factory Lab.), 1949, vol. 15, 850-851; abstr. in  
Chem. Abstr., 1950, vol. 44, 776).

Cation-exchange resins (unstated nature) are used to adsorb Ca  
and Mg from boiler water in a vertical column (gravity feed) with  
elution successively by 50 m.l. 5% HCl and 50 m.l. water, the eluate  
is neutralized to phenolphthalein by NaOH and hardness is determined  
by the oleate method. The phosphate excess is calculated by  $(P_2O_5)$   
excess =  $(P_2O_5)$  total - 10 (hardness), where hardness is expressed  
in degrees.

Open Materials Index

A.S.-SLA METALLURGICAL LITERATURE CLASSIFICATION

STANDARD NO.	SUBDIVISION	SUBDIVISION	CLASSIFICATION												E-Z INDEX												
			SUBDIVISION												SUBDIVISION												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

CHORGIYEV, A.G., inzh.; MAROV, I.F., inzh.; PETATSKIY, V.I., inzh.;  
EDEL'SHTEYN, S.A., inzh.

Automatic regulator for continuous blowdown and recording salinometer  
for feed-water. Elek.sta. 28 no.12:13-14 D '57. (MIRA 12:3)  
(Boilers) (Feed water)

VOLESNIKOVA, R.S.; RODYGINA, G.V.; EDELSHTEYN, S.I.

Use of penicillin aerosols in chronic suppurative processes of the lung. Khirurgiia 32 no.8:39-41 Ag '56. (MLRA 9:12)

Iz fakul'tetskoy khirurgicheskoy kliniki imeni S.I.Spasokukotskogo (zav. - prof. A.N.Bakulef) II Moskovskogo meditsinskogo instituta imeni I.V.Stalina i otdela eksperimental'noi terapii (zav. - prof. Z.V.Yermol'yeva) Vsesoyuznogo nauchno-issledovatel'skogo instituta antibiotikov.

(LUNG DISEASES, ther.

penicillin aerosols in chronic suppuration)

(PENICILLIN, ther. use

chronic suppuration of lungs, admin. in aerosol form)

(AEROSOLS, ther. use

penicillin in chronic suppuration of lungs)

VEYS, R.A.; KDEL'SHTEYN, S.I. (Moskva)

Erythromycin (erythrocin, ilotycin). Terap.arkh. 32 no.11:80-84  
N '60. (MIRA 14:1)  
(ERYTHROMYCIN)

EDEL'SHTEYN, Sh.N.

Role of health education in the prevention of acute gastrointestinal diseases. Zdrav. Ros. Feder. 5 no. 4:16-18 Ap '61. (MIRA 14:4)

1. Iz 38-y polikliniki (glavnnyy vrach G.A. Kulichenko) Smol'ninskogo rayona Leningrada.  
(HEALTH EDUCATION) (DIGESTIVE ORGANS--DISEASES)

EDEL'SHTEYN, S. Z.

Aslanova, M. S. and Edel'shteyn, S. Z. - "Physico-engineering properties of glass fibers," In the symposium: Fiz.-tekhn. svoystva i primeneniye steklovoloknistykh materialov, Moscow-Leningrad, 1949, p. 71-101

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

EDEL'SHTEYN, V. I.

Kvaratshelia, T. K., Shitt, P. G. and Edel'shteyn, V. I. "The trend in training agronomical personnel for subtropical farming," (Articles) Vestnik vys. shkoly, 1949, No. 3, p.27-33

SO: U-4934, 29 Oct 53. (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

1. EDEL'SHTEYN, V. I., Prof.

2. USSR (600)

4. Vegetable Gardening

7. Most important problems for research in vegetable gardening in the light of the decisions of the 19th Party Congress, Sad i og., No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412010003-0

EDEL'SHTEIN, V.I.

Za vysokie urozhai ovoshchey (For high yields of vegetables). Moskva, Selkhozgiz, 1954.  
39 p.

SO: Monthly List of Russian Accessions, Vol 7, No 9, Dec 1954

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412010003-0"

EDEL'SHETIN, V. [I.]

Novye metody vyrashchivaniia ovoshchei (New ways of growing vegetables).  
Moskva, "Molodaia gvardiia," 1954. 56 p. (Zesely uchenykh o sel'skom  
khoziaistve)

SO: Monthly List of Russian Accessions, Vol 7, No. 7, 1954

EDM'L'SHTBYN, V.I., professor, doktor sel'skokhozyaystvennykh nauk;  
SAYNOVA, N.I., kandidat sel'skokhozyaystvennykh nauk.

Raising seedlings in peat-humus pots and in enriched cubes.  
Est.v shkole no.2:17-22 Mr-Apr '54. (MLRA 7:3)

1. Moskovskaya sel'skokhozyaystvennaya akademiya im. K.A.Timirya-  
zeva (for Savinova). (Vegetable gardening)

EDEL'SHTEYN, V. I.

USSR/Agriculture - Planting

Card 1/1

Author : Edel'shteyn, V. I., Dr. of Agric. Sci., Prof.

Title : Protecting sprouts with paper

Periodical : Nauka i Zhizn' 21/4, insert page before 17 and 17-18, April 1954

Abstract : The Department of Vegetable Culture of the K. A. Timiryazev Agricultural Academy in Moscow has developed a new method of sowing vegetable seeds. A machine lays a ribbon of bituminized paper provided with holes for the seeds. The machine also covers the paper with one or two centimeters of earth. The paper chokes the growth of weeds but the plants grow through the openings. Photographs.

Institution : ....

Submitted : ....

EDMIL'SHTEYN, V.I.

[Private vegetable garden] Individual'nyi ogorod. 8.izd. stereo-  
tipnoe. Moskva, Gos. izd-vo sel'skokhoz. lit-ry, 1956. 112 p.  
(Vegetable gardening) (MIRA 11:9)

**EDEL'SHTEYN, V.I.**

BENEDIKTOV, I.A., redaktor; GRITSENKO, A.V., redaktor; IL'IN, M.A., zamestniel' glavnogo redaktora, LAPTEV, I.D., LISKUN, Ye.F.; LOBANOV, P.P., glavnnyy redaktor; LYSenko, T.D.; SKRYABIN, K.I.; STOLETOV, V.H.; PAVLOV, G.I., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SOKOLOV, N.S., professor, nauchnyy redaktor; ANTIPOV-KARATAYEV, I.N., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KARPINSKIY, N.P., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SHESTAKOV, A.G., doktor sel'skokhozyaystvennykh nauk, professor, nauchnyy redaktor; RUBIN, B.A., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KOMARNITSKIY, N.A., dotsent, nauchnyy redaktor; LYSenko, T.D., akademik, nauchnyy redaktor; POLYAKOV, I.M., professor, nauchnyy redaktor; SHCHEGOLEV, V.N., doktor sel'skokhozyaystvennykh nauk, professor, nauchnyy redaktor; YAKUSHKIN, I.V., akademik, nauchnyy redaktor; LARIN, I.V., professor, doktor biologicheskikh nauk, nauchnyy redaktor; SMIRNOV, S.P., professor, doktor biologicheskiy nauk, nauchnyy redaktor; EDEL'SHTEYN, V.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SHCHERBACHEV, D.M., professor, doktor meditsinskikh nauk, nauchnyy redaktor; OGOL'EVTs, G.S., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; YAKOVLEV, P.N., akademik, nauchnyy redaktor; YEKIMOV, V.P., agronom, nauchnyy redaktor [deceased], YETINGEN, G.P., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; TIMOFEEV, N.N., professor, nauchnyy redaktor; TUROV, S.I., professor, doktor biologicheskikh nauk; YUDIN, V.M., akademik, nauchnyy redaktor; LISKUN, Ye.F., akademik, nauchnyy redaktor; VITT, V.U., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KALININ, V.I.. kandidat sel'skokhozyaystvennykh nauk. nauchnyy redaktor.

(Continued on next page)

BENEDIKTOV, I.A.--- (continued) Card 2.

GRIBBEN', L.K., akademik, nauchnyy redaktor; NIKOLAYEV, A.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; RED'KIN, A.P., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SMETNEV, S.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POPOV, I.S., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; MANTEYFEL', P.A., professor nauchnyy redaktor; INIKHOV, G.S., professor, doktor khimicheskikh nauk, nauchnyy redaktor; ANTIMOV, A.N., professor, nauchnyy redaktor; GUBIN, A.F., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POLTEV, V.I., professor, doktor veterinarnykh nauk, nauchnyy redaktor; LINDE, V.V., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; CHERGAS, B.I., professor, doktor biologicheskikh nauk, nauchnyy redaktor; NIKOL'SKIY, G.V., professor, nauchnyy redaktor; AVTOKRATOV, D.M., professor, doktor veterinarnykh nauk, nauchnyy redaktor; IVANOV, S.V., professor, doktor biologicheskikh nauk, nauchnyy redaktor; VIKTOROV, K.P., professor, doktor veterinarnykh nauk, nauchnyy redaktor; KOLYAKOV, Ya.Ye., professor, doktor veterinarnykh nauk, nauchnyy redaktor; ANTIFIN, D.N., professor, doktor veterinarnykh nauk, nauchnyy redaktor; MARKOV, A.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; DOMRACHEV, G.V., professor, doktor veterinarnykh nauk, nauchnyy redaktor; OLIVKOV, B.M., professor, doktor veterinarnykh nauk nauchnyy redaktor [deceased]; FLEGMATOV, N.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; BOLTINSKIY, V.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; VIL'YAMS, Vl.P., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; KRASNOV, V.S., kandidat tekhnicheskikh nauk, nauchnyy redaktor;

BENEDIKTOV, I.A.---(continued) Card 3.

YEVREMINOV, M.G., akademik, nauchnyy redaktor; SAZONOV, N.A., doktor tekhnicheskikh nauk, nauchnyy redaktor; NIKANDROV, B.I., inzhener, nauchnyy redaktor; KOSTYAKOV, A.N., akademik, nauchnyy redaktor; CHERKASOV, A.A., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; DAVITAYA, F.F., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; IVANOV, N.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; ORLOV, P.M., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; LOZA, G.M., kandidat ekonomicheskikh nauk, nauchnyy redaktor; CHERNOV, A.V., kontrol'nyy redaktor; ZAVARSKIY, A.I., redaktor; ROS-SOSHANSKAYA, V.A., redaktor; FILATOVA, N.I., redaktor; YEMEL'YANOVA, N.I., redaktor; SILIN, V.S., redaktor BRANZBURG, A.Yu., redaktor; MAGNITSKIY, A.V., redaktor terminov; KUDRYAVTSEVA, A.G., redaktor terminov; AKSENOVA, A.P., mladshiy redaktor; MALYAVSKAYA, O.A., mladshiy redaktor; YEDOTOVA, A.F., tekhnicheskiy redaktor

(Continued on next card)

BENEDIKTOV, I.A.---(continued) Card 4.

[Agricultural encyclopedia] Sel'skokhoziaistvennaia entsiklopedia.  
Izd.3-e, perer. Moskva, Gos. izd-vo selkhoz. lit-ry. Vol.5. [T-IA.]  
1956. 663 p. (MLRA 9:9)  
(Agriculture—Dictionaries and encyclopedias)

~~KDEL'SHTEYN, V.I., professor.~~

Production line .... in the vegetable garden. Znan.sila 31 no.2:  
17-18 F '56. (MLRA 9:5)  
(Vegetable gardening)

EDEL'SHTEYN, Vitaliy Ivanovich

[Private garden plots] Individual'nyi ogorod. 9 izd. Moskva,  
Gosudarstvennoe izd-vo sel'skokhoziaistvennoi lit-ry, 1957. 111 p.  
(Vegetable gardening) (MIRA 12:4)

*EDEL'SHTEYN V.I.*

ZIMINA, Tat'yana Alekseyevna; ~~EDEL'SHTEYN, V.I.~~, prof., otvetstvennyy red.;  
KRYLOV, S.V., red.izdatel'stva; POL'SITSKAYA, S.M., tekhn.red.

[Vegetable gardening in Sakhalin] Ovoshchеводство на Сахалине.  
Moskva, Izd-vo Akad.nauk SSSR, 1957. 241 p. (MIRA 10:11)  
(Sakhalin--Vegetable gardening)

*EDELSHTEYN, V.I.*  
USSR/Cultivated Plants. Potatoes. Vegetables. Melons

M-5

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1574

Author : V.I. Edel'shteyn  
Inst : Moscow Order of Lenin Agricultural Academy imeni K.A. Timiryazev  
Title : The Agrotechny of Producing of Early Vegetables on Open Land

Orig Pub : Sad i ogorod, 1957, No 1, 10-18

Abstract : The achievements of the TSKhA [The Moscow "Order of Lenin Agricultural Academy imeni K.A. Timiryazev] Vegetable Test Station and the National Research Institute for Vegetable Cultivation in obtaining large harvests of vegetable cultures have been cited.

Card : 1/1

USSR / Cultivated Plants. Potato. Vegetables. Melons. M-4

Abs Jour: Ref Zhur-Biol., 1958, No 16, 72965.

Author : Edel'shteyn, V. I.

Inst : Not given.

Title : Raising Potatoes by Seeds.

Orig Pub: Kartofel', 1957, No 2, 25-29.

Abstract: At the vegetable experimental station of the TAA [Timirzayev Agricultural Academy], early plantings of potato seeds gave the best effect with a distribution of 45 x 8 and 45 x 4 cm. The average potato harvest in open ground comprised 6-10 t, in warm ground 19 t; in a planting arrangement of 7 x 4 cm to obtain potato seeds for hand sowing, a harvest of 33 t/ha was obtained. By raising potatoes to seedlings and planting June 8 with a feeding area 60 x 30 cm, a harvest of 25.5-41 t/ha was obtained.  
-- V. K. Sal'nikov.

Card 1/1

EDEL'SHYN, V.I.

[Manual of practical work in vegetable gardening] Rukovodstvo k prakticheskim zaniatiiam po oveshchavodstvu. 2., perer. izd. Moscow, Gos. izd-vo selkhoz. lit-ry, 1958. 239 p. (MIRA 11:10)  
(Vegetable gardening)

KDEL'SHTEYN Vitaliy Ivanovich, pochetnyy akademik.

About our green friends. IUn.nat.no.1:29-32 Ja '58. (MIRA 10:12)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im.V.I.Lenina.  
(Vegetable gardening--Study and teaching)

*EDEL'SHTEYN, V.I.*

ATABEKOVA, A.I., doktor sel'skokhozyaystvennykh nauk; MAYSURIAN, N.A., doktor  
sel'skokhozyaystvennykh nauk, prof.; NEORUL', A.M., doktor sel'sko-  
khozyaystvennykh nauk, prof.; EDEL'SHTEYN, V.I., pochetnyy akademik.

A Soviet scientist, Academician N.I. Vavilov. Izv. TSKhA no.1(20):  
221-228 '58.  
(MIRA 11:4)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.  
Lenina (for Edel'shteyn).  
(Vavilov, Nikolai Ivanovich, 1887-1942)

COUNTRY : USSR  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits. M  
ABS. JOUR. : RZhBiol., №. 23 1958. №. 104693  
AUTHOR : Edel'shteyn, V. I., Tarakanov, G. I.  
INST. :  
TITLE : On Transparent Tarpaulins.  
  
ORIG. PUB. : Sud i ogorod, 1958, No. 4, 29-31  
  
ABSTRACT : On the tests (since 1952) of 7 types of tarpaulins at the Vegetable Experiment Station of TSIKhA. Recommended for practical utilization are polyethylene tarpaulins distinguished by frost resistance (to -60°) and tensile strength (130-300 kg) and polyamide tarpaulin PK-4 ("perfol"), with tensile strength of 1250-1300 kg/cm<sup>2</sup>. In greenhouses, upon covering with tarpaulin, the soil temperature rose by 1.5-2°, and the temperature of the air - by 3-4°.

Card: 1/1

53

EDML'SHTEYN, V.I.

Mulching seedbeds. Mauka i pered, op. v sel'khoz, 8 no. 8:44-47  
Ag '58. (MIRA 11:10)

1. Vsesoyuzhaya akademiya sel'skokhozyaystvennykh nauk im. V.I.  
Lenina.

(Mulching) (Vegetable gardening)

EDEL'SHT'YN, V. I.

Advice to vegetable gardeners. Rab. i sinl. 24 no.4:3 of cover Ap  
'58. (Vegetable gardening)

ALISOV, M.S.; EDELSHTEYN, V.I., red.

[Vegetables and potatoes on flood lands] Ovoshchi i kartofel'  
na poimennykh zemliakh. Moskva, Gos.izd-vo sel'khoz.lit-ry,  
1959. 237 p.  
(Vegetable gardening) (Potatoes)  
(Alluvial lands)

(MIRA 13:?)

TIMOFEEV, Nikolay Nikolayevich, prof.; VOLKOVA, A.A., dotsent;  
CHIZHOV, S.T., dotsent; EDEL'SHTEYN, V.I., pochetnyy akademik,  
retsenszent; KVASNIKOV, B.V., prof., retsenzent; GRACHEVA, V.S.,  
red.; BALLOD, A.I., tekhn.red.

[Vegetable breeding and seed production] Seleksiia i semeno-  
vodstvo ovoshchnykh kul'tur. Moskva, Gos.izd-vo sel'khoz.lit-ry,  
1960. 478 p.  
(MIRA 14:2)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.  
Lenina (for Edel'shteyn).

(Vegetables)

EDEL'SHTEYN, V.I., prof., doktor sel'skokhozyaystvennykh nauk,  
pochetnyy akademik; KOCHETKOV, V.P., aspirant

Methods of placing strip paper mulch in mechanized planting of  
carrots [with summary in English]. Izv. TSKhA no.2:85-97 '61.  
(MIRA 14:8)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni  
Lenina (for Edel'shteyn).  
(Mulching) (Carrots)

EDELWEISS. Vitaliy Ivanovich, akademik, Gercy Setsialisticheskogo  
Truda

You are going to live under communism! Ilm. nat. no.10:4-9  
O '61. (MIRA 14:10)

(Communism)  
(Agriculture)

EDEL'SHTEYN, V.I., prof.

Reciprocal influence of vegetable crops. Priroda 50 no.9:123-  
124 S '61. (MIRA 14:8)

1. Moskovskaya sel'skokhozyaystvennaya akademiya im.  
K.A. Timiryazeva.  
(Vegetable gardening)  
(Allelopathy)

VASILENKO, Nikolay Grigor'yevich, kand. sel'khoz. nauk; EDEL'SHTEYN,  
V.I., akademik, Geroy Sotsialisticheskogo Truda, red.;  
TAIROVA, V.N., red.; BALLOD, A.I., tekhn. red.

[Rare vegetables and spice plants] Maloraspredelenyye ovoshchi  
i priarye rasteniiia. Pod red. V.I.Edel'shteina. Moskva, Sel'-  
khozizdat, 1962. 215 p. (MIRA 15:7)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.  
Lenina (for Edel'shteyn). (Herbs) (Vegetables)

EDEL'SHTEYN, Vitaliy Ivanovich, prof.; BYKOVA, M.G., red.; CHELYSHKIN,  
Yu.G., red.; GUREVICH, M.M., tekhn. red.; BALLOD, A.I.,  
tekhn. red.

[Vegetable gardening]Ovoshchovedstvo. 3., perer. izd. Mo-  
skva, Sel'khozizdat, 1962. 439 p. (MIRA 16:2)  
(Vegetable gardening)

EDEL'SHTEYN, V.I., pochetny akademik

Some characteristics of the growth, development, and formation  
of the vegetable crop as a basis for cultivation practices.  
(MIRA 16:6)  
Izv. TSKHA no.6:7-17 '62.

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni  
Lenina.  
(Vegetable gardening)

ZOLOTAREV, V.; VASIL'YEVA, Ye., red.; EDEL'SHTEYN, V. I., akad., red.;  
POKHLEBKINA, M., tekhn. red.  
[Cucumbers] Ogurtay. Pod red. V.I.Edel'shteina. Moskva,  
Moskovskiy rabochii, 1963. 79 p. (MIRA 16:7)  
1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im.  
V.I.Lenina (for Edel'shteyn).  
(Cucumbers)

DEVOCHKIN, P.A., kand. sel'skokh. nauk, dötsent; DIANOV, V.I., aspirant;  
EDEL'SHTEYN, V.I., pochetnyy akademik, nauchnyy rukovoditel'

Cotton plants in sowing under paper strips. Izv. TSKHA no.1:  
7-11 '63. (MIRA 16:7)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk Imeni  
Lenina (for Edel'shteyn).  
(Cotton growing) (Mulching)

EDEL'SHTEYN, V.I., pochetnyy akademik

Into the knapsack of a detachment. IUn.nat. no.3:6-7 Mr '63.  
(MIRA 16:4)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni  
Lenina.

(Potatoes)

EDEL'SHTEYN, V.I., pochetnyy akademik; PAPONOV, L.N., stol'styy nauchnyy  
sotrudnik, kand. sel'skokhoz. nauk

Effect of space arrangement and soil fertility on the development  
and formation of sex in some monoecious plants. Izv. TINKh no.2:  
138-143 '64. (HEA 17:12)

1. Kafedra ovoshchovedstva Moskovskoy ordena Lenina sel'skokhozyayst-  
vennoy akademii im. K.A. Timiryazeva (for Paponov). 2. Vsesoyuznaya  
akademiya sel'skokhozyaystvennykh nauk im. Lenina (for Edel'shteyn).

EDEL'SHTEYN, V. I., pochetnyy akademik

Overall mechanization of growing vegetables, industrial crops, and  
potatoes. Izv. TSKHA no.4:48-60 '64.

(MIRA 17:11)

1. Kafedra ovoshchеводства Sel'skokhozyaystvennoy akademii imeni  
Timiryazeva. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk  
imeni Lenina.

ANTONYUK, B.N.; DENESYUK, I.P.; KUROV, Yu.P.; VAYNSHTEYN, A.I.; BRRDNIKOV, V.A.;  
VEYTSMAN, M.B.; IVANOV, A.A.; IVANOV, A.S.; GAYEVSKIY, B.E.; KOZEL'TSEV,  
L.K.; KOZEL'TSEV, L.I.; KIVALDIN, S.G.; MIROSHIN, A.I.; MIKOV, G.Ye.;  
ZUBKOVSKIY, B.P.; IZYUMOV, B.N.; EDEL'SHTEYN, V.I.; KOCHETKOV, V.P.;  
BUBLIKOV, A.V.; DZHANASHIYA, V.A.

Patents. Bum. i der. prom. no.1:53-54 Ja-Mr '65.

(MIRA 18:10)

FEDEL'SHTEYN, V.I., pochetnyy akademik; SARUROV, N.V., prof.; TIMOFFEEV,  
N.N., prof.; TIRAKANOV, G.I., dotsent; VOL'F, N.M.

Vegetable Experiment Station, the oldest experimental basis of  
scientific vegetable gardening. Izv. TSKHA no.2:192-217 '65.  
(MIRA 18:9)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni  
Lenina (for Fedel'shteyn). 2. Direktor ovoshchnoy optychnoy  
stantsii Moskovskoy akademii sel'skokhozyaystvennykh nauk  
imeni Timiryazeva (for Vol'f).

BLINCHEVSKIY, M.Z.; FILATOV, N.A., zasl. agronom RSFSR, retsenzent;  
EDEL'SHTEYN, V.I., akademik, red. [deceased]; SOKOLOVA, G.,  
red.

[Manual on the growing of vegetables under glass] Spravochnik po ovoshchvodstvu zashchishchennogo grunta. Moskva,  
Mosk. rabochii, 1965. 243 p. (MIRA 18:12)

CHIZHIKOV, D.M.; EDEL'SHTEYN, V.M.

Distribution coefficient of tin in selenium. *Fiz. tver. tela 2*  
no.5:863-865 My '60. (MIRA 13:10)

1. Institut metallurgii im. A.A.Baykova An SSSR, Moskva.  
(Selenium) (Tin)

S/080/62/035/009/002/014  
D204/D307

AUTHORS: Tsvetkov, Yu.V., and Edel'shteyn, V.M.

TITLE: The influence of pressure on the activity of components  
in boiling alloys of cadmium and zinc

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 9, 1962,  
1927 - 1933

TEXT: The above problem was investigated to determine the effect  
of pressure on the effectiveness of separation (e.g. by distilla-  
tion) of components possessing similar, high boiling points, from  
their mixtures. Analytical purity metals were used. The boiling  
points ( $T$ ) of alloys containing 0, 25, 50, 60, 75 and 100 mole % Cd  
were measured between 100 and 3800 mm Hg and were found to range  
respectively from 735 to 1090, 650 to 1000, 633 to 977, 627 to 967,  
625 to 957 and 610 to 930°C for the above compositions. Good linear  
relationships were obtained by plotting  $\log \pi$ , where  $\pi$  = pressure,  
against  $1/T$  (°K). The activity coefficients of Cd ( $\gamma$ ) were calcula-  
ted with the aid of van Laar's equation for molar fractions of Cd  
of 0.05, 0.1, 0.25, 0.4, 0.5, 0.6, 0.75, 0.9 and 0.95, between 100  
Card 1/2

The influence of pressure on ...

S/080/62/035/009/002/014  
D204/D307

and 3800 mm Hg, finding values:  $\gamma_{100} = 2.343, 2.149, 1.701, 1.405,$   
 $1.266, 1.163, 1.060, 1.009, 1.002$  and  $\gamma_{3800} = 1.364, 1.322, 1.213,$   
 $1.132, 1.090, 1.056, 1.022, 1.003$  and  $1.001$  for the above compositions respectively. These values were in fair agreement with those calculated from  $\log \gamma = \frac{\Delta \bar{H}}{4.576T}$ , where  $\Delta \bar{H}$  is the partial heat of solution. Thus Cd-Zn systems showed positive deviations from Raoult's law, which increased at lower pressures and at higher contents of Zn. The efficiency of separation of the two components by distillation or rectification should therefore be promoted by lowering the external pressure. There are 4 figures and 3 tables.

ASSOCIATION: Institut metallurgii imeni A.A. Baykova, AN SSSR  
(Institute of Metallurgy imeni A.A. Baykov, AS USSR)

SUBMITTED: June 19, 1961

Card 2/2

S/076/62/036/012/013/014  
B101/B180

AUTHORS: Tsvetkov, Yu.Y., Edel'shteyn, V. M., and Tagirov, I. K.  
(Moscow)

TITLE: Method of studying the liquid - vapor equilibrium of high-boiling mixtures at pressures other than atmospheric

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 12, 1962, 2806 - 2808

TEXT: An apparatus with vapor recirculation based on one by J. Othmer (Ind. Eng. Chem., 20, 743, 1928) is suggested for determining the liquid - vapor equilibrium of high-boiling alloys. 2500 g of the alloy are heated in an evaporator at constant temperature. The temperature in the steam receiver is kept just above the dew point, while in the condenser it is kept below dew point, but above boiling point. As soon as equilibrium is established, samples taken from condenser, evaporator, and recirculator are analyzed. A cadmium - zinc system was used to test this method. The liquid-vapor equilibrium diagram was plotted for alloys containing 0, 25, 50, 75, and 100 mole% Cd at pressures of 200, 760, and 2280 mm Hg (Fig. 3). There are 3 figures.

Card 1/2

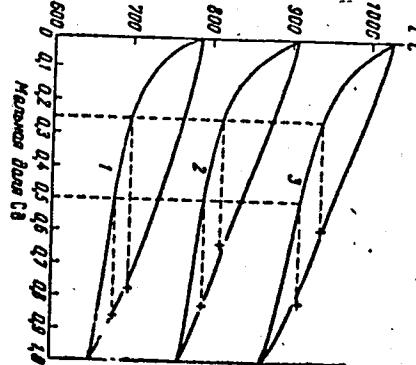
Method of studying the ...

S/076/62/036/012/013/014  
B101/B180

ASSOCIATION: Institut metallurgii im. A. A. Baykova (Institute of  
Metallurgy imeni A. A. Baykov)

SUBMITTED: March 22, 1962

Fig. 3. Liquid - vapor equilibrium diagram in the Cd - Zn system;  
pressures in mm Hg : (1) 200; (2) 760; (3) 2280; abscissa : molar part of  
Cd.



Card 2/2

*18.1290*S/020/62/143/003/027/029  
B101/B144

AUTHORS: Chizhikov, D. M., Corresponding Member AS USSR, Tsvetkov,  
Yu. V., and Edel'steyn, V. M.

10

TITLE: The liquid-vapor equilibrium of high-boiling mixtures at  
pressures deviating from the atmospheric with the cadmium-zinc  
system as example

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 3, 1962, 655 - 657

TEXT: An experimental determination of the liquid-vapor equilibrium in  
autoclaves was carried out with internal heating. The apparatus was  
evacuated, filled with inert gas, and a certain constant pressure main-  
tained. Two series of experiments were carried out: (a) determination of  
the dependence of the b.p. on the composition of the Cd-Zn alloy (0-100% Cd)  
and the pressure (100 - 3800 mm Hg); (b) determination of the effect of  
pressure on the composition of the vapor in the case of recirculation of  
the condensed vapor. In the series (a) the alloys were heated in graphite  
crucibles and the temperature recorded with an ЭПП-09 (EPP-09) recording  
electronic potentiometer. For the second series an equilibrium apparatus

Card 1/2

The liquid-vapor equilibrium...

S/020/62/143/003/027/029  
B101/B144

of graphite similar in principle to D. F. Othmer's (see below). was used. The activity coefficients of the components were calculated from the experimental data, and by means of these and the temperature dependence of the vapor pressure, the equilibrium diagram liquid-vapor was plotted (Fig. 2). Because of the discovery of the positive deviation of the system examined from the law for ideal solutions, decrease in pressure is presumed to facilitate the separation of Cd from Zn in the case of distillation or rectification. The data obtained by means of the recirculation apparatus confirm the results. There are 2 figures and 7 references: 3 Soviet-bloc and 4 non-Soviet-bloc. The four references to English-language publications read as follows: D. F. Othmer, Ind. and Eng. Chem., 35, no. 5, 614 (1943); O. Kubaschewski, J. A. Catterall, Thermochemical Data of Alloys, London, 1956; K. K. Kelley, U. S. Bur. Min. Bull., no. 383 (1935); C. Maier, U. S. Bur. Min. Bull., no. 324 (1930).

SUBMITTED: October 7, 1961

Fig. 2. Equilibrium diagrams liquid-vapor in the Cd-Zn system.  
(1) 200 mm Hg; (2) 760 mm Hg; (3) 2280 mm Hg; abscissa: molar parts.

Card 2/3

GOYFMAN, M.A.; EDEL'SHTEYN, Ya.M.

Measures for the control of microsporosis caused by microsporum  
felineum. Vest. derm. i ven. 38 no.11:57-58 N '64. (MIRA 18:4)

1. Kheronskiy oblastnoy kozhno-venerologicheskiy dispanser (glavnyy  
vrach M.A.Goyfman).

EDEL'SHTEIN, Yakov Samuilovich.

EDEL'SHTEIN, Yakov Samuilovich. ...Geologicheskii ocherk Minusinskoi kotloving i prilegaiushchikh chastei Kuznetskogo Ala-Tau i Vostochnogo Saiana. Lenigrad, AN SSSR, 1932. 59 p.

"Spisok literatury": p. 57-59.

NN

So: LC, Soviet Geography, Part II, 1951/Unclassified.

EDEL'SHTEYN, YA. S.

The structure of surface and fundamental geomorphological particulars of northern regions of the USSR. Geologai Polezuyye Iskopayemye Severa SSSR' Vol. 1, 1935

So: Trudy Arkticheskogo Nauchno-Issledovatel'skogo Instituta, GUSMP, Council of Ministers, Vol. 201, 1948

EDEL'SHTEYN Yakov Samuilovich.

Instructions for the geomorphological study and cartography of the Urals. Leningrad,  
Izd-vo glavsevmorputi, 1936. 90 p.

EDEL'SHTEIN, Yakov Samuilovich.

A geological survey of the Minusinsk Valley and the adjoining section of  
Kuznetsk Ala-Tau and the eastern Sayans Leningrad, Izd, akad, nauk SSSR, 1958. 59 p.  
Map. (Akademija nauk SSR - Institut geologicheskikh nauk.  
Ocherki po geolgi Sibiri (no. 3)

EDEL'SHTEYN, Ya.		PROCESSES AND PROPERTIES INDEX	
A. S. Petrovich Karpinskii 1846-1936. Ya. Soviet Gos. S. No. 2, 161(1938). F. H. Rathmann		2	
Chemical Index		Metallurgical Index	
GENERAL INDEX		GENERAL INDEX	
ALPHABETICAL INDEX		ALPHABETICAL INDEX	
METALLURGICAL LITERATURE CLASSIFICATION		METALLURGICAL LITERATURE CLASSIFICATION	
#	GROUPS	#	GROUPS
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100
101	102	103	104
105	106	107	108
109	110	111	112
113	114	115	116
117	118	119	120
121	122	123	124
125	126	127	128
129	130	131	132
133	134	135	136
137	138	139	140
141	142	143	144
145	146	147	148
149	150	151	152
153	154	155	156
157	158	159	160
161	162	163	164
165	166	167	168
169	170	171	172
173	174	175	176
177	178	179	180
181	182	183	184
185	186	187	188
189	190	191	192
193	194	195	196
197	198	199	200
201	202	203	204
205	206	207	208
209	210	211	212
213	214	215	216
217	218	219	220
221	222	223	224
225	226	227	228
229	230	231	232
233	234	235	236
237	238	239	240
241	242	243	244
245	246	247	248
249	250	251	252
253	254	255	256
257	258	259	260
261	262	263	264
265	266	267	268
269	270	271	272
273	274	275	276
277	278	279	280
281	282	283	284
285	286	287	288
289	290	291	292
293	294	295	296
297	298	299	300
301	302	303	304
305	306	307	308
309	310	311	312
313	314	315	316
317	318	319	320
321	322	323	324
325	326	327	328
329	330	331	332
333	334	335	336
337	338	339	340
341	342	343	344
345	346	347	348
349	350	351	352
353	354	355	356
357	358	359	360
361	362	363	364
365	366	367	368
369	370	371	372
373	374	375	376
377	378	379	380
381	382	383	384
385	386	387	388
389	390	391	392
393	394	395	396
397	398	399	400
401	402	403	404
405	406	407	408
409	410	411	412
413	414	415	416
417	418	419	420
421	422	423	424
425	426	427	428
429	430	431	432
433	434	435	436
437	438	439	440
441	442	443	444
445	446	447	448
449	450	451	452
453	454	455	456
457	458	459	460
461	462	463	464
465	466	467	468
469	470	471	472
473	474	475	476
477	478	479	480
481	482	483	484
485	486	487	488
489	490	491	492
493	494	495	496
497	498	499	500
501	502	503	504
505	506	507	508
509	510	511	512
513	514	515	516
517	518	519	520
521	522	523	524
525	526	527	528
529	530	531	532
533	534	535	536
537	538	539	540
541	542	543	544
545	546	547	548
549	550	551	552
553	554	555	556
557	558	559	560
561	562	563	564
565	566	567	568
569	570	571	572
573	574	575	576
577	578	579	580
581	582	583	584
585	586	587	588
589	590	591	592
593	594	595	596
597	598	599	600
601	602	603	604
605	606	607	608
609	610	611	612
613	614	615	616
617	618	619	620
621	622	623	624
625	626	627	628
629	630	631	632
633	634	635	636
637	638	639	640
641	642	643	644
645	646	647	648
649	650	651	652
653	654	655	656
657	658	659	660
661	662	663	664
665	666	667	668
669	670	671	672
673	674	675	676
677	678	679	680
681	682	683	684
685	686	687	688
689	690	691	692
693	694	695	696
697	698	699	700
701	702	703	704
705	706	707	708
709	710	711	712
713	714	715	716
717	718	719	720
721	722	723	724
725	726	727	728
729	730	731	732
733	734	735	736
737	738	739	740
741	742	743	744
745	746	747	748
749	750	751	752
753	754	755	756
757	758	759	760
761	762	763	764
765	766	767	768
769	770	771	772
773	774	775	776
777	778	779	780
781	782	783	784
785	786	787	788
789	790	791	792
793	794	795	796
797	798	799	800
801	802	803	804
805	806	807	808
809	810	811	812
813	814	815	816
817	818	819	820
821	822	823	824
825	826	827	828
829	830	831	832
833	834	835	836
837	838	839	840
841	842	843	844
845	846	847	848
849	850	851	852
853	854	855	856
857	858	859	860
861	862	863	864
865	866	867	868
869	870	871	872
873	874	875	876
877	878	879	880
881	882	883	884
885	886	887	888
889	890	891	892
893	894	895	896
897	898	899	900
901	902	903	904
905	906	907	908
909	910	911	912
913	914	915	916
917	918	919	920
921	922	923	924
925	926	927	928
929	930	931	932
933	934	935	936
937	938	939	940
941	942	943	944
945	946	947	948
949	950	951	952
953	954	955	956
957	958	959	960
961	962	963	964
965	966	967	968
969	970	971	972
973	974	975	976
977	978	979	980
981	982	983	984
985	986	987	988
989	990	991	992
993	994	995	996
997	998	999	1000

EDEL'SHTEYN, Ya.S.; SHITIKOV, M.F., redaktor; VODOLAGINA, S.D., tekhnicheskiy redaktor.

[Short methodological manual on geomorphological observations in the field] Kratkoe metodicheskoe rukovodstvo dlia proizvodstva geomorfologicheskikh nabliudenii v pole. Moskva, Gos. izd-vo geologicheskoi lit-ry Ministerstva geologii SSSR, 1947. 65 p. [Microfilm] (MIRA 8:1) (Geology, Structural) (Physical geography)

EDEL'SHTEIN, YAKOV SAMUILOVICH

EDEL'SHTEIN, YAKOV SAMUILOVICH. Osnovy geomorfologii; kratkii kurs ... dlia geologo-  
gorazvedochnykh institutov i geologicheskikh spetsial'nostei vuzov. Izd.  
2., ispr. i dop, Moskva, Gos. Izd-vo geolog. lit-ry, 1947. 398 p.  
"Glavnaishaia literatura": p. 393-/394/

DLC: QB54.E34 1947

SO: LC, Soviet Geography, Part I, 1951, Uncl.

EHEL'SHTEYN, Ya.S., prof.

"Geology of the U.S.S.R." and the 1:1,000,000 geological map  
of the U.S.S.R. Vest. IgU 2 no.6:87-94 Je '47.  
(MIRA 12:9)  
(Geology)

EDEL'SHTEIN, YA. S.

IA 29T50

USSR/Geophysical Prospecting  
Geography

Jul/Aug 1947

"Physical Geographic Science during Thirty Years of  
Soviet Rule," Ya. S. Edel'shtein, 14 pp.

"Iz Vsesoyuz Geog Obshchestva" Vol LXXIX, No 4

Historical account of the various physical geographic  
works which have been accomplished under the Soviet  
regime. Discusses the various explorations which  
have been made of the more important Russian river  
systems and studies of the seas in and around Russia,  
mountain peaks, and mountain ranges.

LC

29T50

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412010003-0

EDEL'SHTEIN, IAKOV SAMUILLOVICH, ED.

Explanatory notes to the geomorphological map of the Urals, scale 1:500,000. Moskva,  
Gos. izd-vo geol. lit-ry, 1948. 94 p. (Map 52-88)

G7002.U72C2 1945.R8 Suppl.

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412010003-0"

1. EDEL'SHTEYN, YA. S.

2. USSR (600)

4. Geology and Geography

7. Principles of Geomorphology. Ya. S. Edel'shteyn. (Second edition, revised and completed, Moscow-Leningrad, State Geological Press). Reviewed by Yu.K. Yefremov, Sov. Kniga, No. 3, 1948.

9. [REDACTED] Report U-3081, 16 Jan. 1953. Unclassified.

124-57-2-2436

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 2, p 132 (USSR)

AUTHORS: Shikhobalov, S. P., Krasnov, V. M., Maksutova, T. D., Tseyts, V. V., Edel'steyn, Ye. I.

TITLE: Experimental Investigation of the Stresses in a Hydraulic-turbine Blade (Eksperimental'noye issledovaniye napryazhennogo sostoyaniya lopasti vodyanoy turbiny)

PERIODICAL: V sb.: Vopr. prochnosti lopastey vodyanoy turbiny.  
Leningrad, Izd-vo LGU, 1954, pp 174-216

ABSTRACT: Presentation of an experimental investigation of the stresses prevailing in a hydraulic-turbine blade subjected to the action of a pressure uniformly distributed over its working surface. The investigation was conducted by means of the photoelastic method, wherein the model was "frozen" and subsequently sectioned off. The model was made of bakelite; the bakelite resin was cast into a mold made of a readily fusible alloy. The uniform pressure was exerted by means of a system of glass rods located vertically on the working surface of the blade. In the determination of the stresses due to the edge effect, use was made of data on the "edge effect" in a bakelite wedge having a thickness equal

Card 1/2

124-57-2-2436

**Experimental Investigation of the Stresses in a Hydraulic-turbine Blade**

to the thickness of the blade profile and subjected to the same thermal and other conditions as the blade model, but free of any external forces. It is shown that in the bakelite used an "edge effect" arises as a result of desiccation, i.e., the separation of component substances, mainly water and phenol, and that a working medium may be found in which the "edge effect" does not occur. In a practical attempt to avoid any "edge effect" the model was loaded in a water-glycerol mixture and was protectively coated with latex. The interpretation of the stress conditions in the blade was performed according to the formulas of three-dimensional photoelasticity. The results lead to the conclusion that the blade, considered as a shell with variable thickness, is subjected to pure moment stresses. A comparison with L. M. Kachanov's solution (Rzh Mekh, 1955, abstract 906) is also adduced.

V. M. Krasnov

1. Turbine blades--Stresses    2. Stress analysis

Card 2/2

Edel'shTeyn, Ye. I.

WILL I WIN

四

卷之三

*Polycentropus-pictulus* was collected near Taitung, Taitung District, Taiwan, by James A. E. Morris (Optical Research Institute, Inc., New York City). The specimens were taken from the genus of *Paraceraspis* (Hymenoptera, Encyrtidae), 2,400 meters elevation, in September 1960. Dr. P. K. Krantz also informed us.

**NATIONAL BOARD:** Prof. G. C. Durrin, Dr. J. E. Fitch, Dr. W. H. Hartshorn, Prof. J. J. Pfeiffer, Prof. T. H. Prentiss, Prof. R. S. Wilson, and Prof. J. M. Zelazny.

**EDITORIAL BOARD:** Prof. G. C. Durrin, Dr. J. E. Fitch, Dr. W. H. Hartshorn, Prof. J. J. Pfeiffer, Prof. T. H. Prentiss, Prof. R. S. Wilson, and Prof. J. M. Zelazny.

**NOTICE:** This publication of 30 articles is intended for practical and original research work. The emphasis will be given to the analysis of mobile parts and structures connected with experimental stress analysis of critical components.

**5. Investigation methods.** The following sections describe the methods used by the Bureau of Investigation to determine whether or not there has been a violation of the Federal Rules of Evidence. These methods are not intended to be exclusive, but rather to illustrate the general nature of the investigation.

S.	Title	Page
1.	Optical Methods for Determination of the Tensile Strength of Fibres by the Optical Polarization Method	57
2.	Determination of the Optical Polarization of Colloidized Silica	65
3.	Effect of Water on the Strength of Strongly Anisotropic Polymeric Materials	73
4.	<u>Khvorost, V. I.</u> On the Influence of Radiation on the Mechanical Properties of Synthetic Rubber	81
5.	<u>Khvorost, V. I.</u> On the Relation of a Two-Dimensional Problem to the Three-Dimensional Problem of Determining the Form of Normal Stress in the Two-Dimensional Problem of Plasticity	89
6.	<u>Khvorost, V. I.</u> On the Experimental Mechanics-Testing Method	97
<b>III. OPTICAL ACTIVE MATERIALS</b>		
7.	<u>Kolosov, S. S.</u> Optically Active Materials Used in Laboratory Practice	151
8.	<u>Kolosov, S. S.</u> and V. A. Shchegolevskaya. Use of Optic Polymers and Optically Active Polymers for the Preparation of New Optically Active Materials	159
9.	<u>Kolosov, S. S.</u> (Coordinator). A New Coordinatorial Nomenclature in Optical Polymer	169
<b>IV. INSTRUMENTS FOR OPTICAL-POLARIZATION DETERMINATIONS</b>		
10.	<u>Mashkovskaya</u> . Instruments of the Scientific Research Institute for Stereo Analysis by the Optical Polarization Method	179

EDEL'SHTEYN, Ye. I.

Physicists L. M. Kachanov, Ye. I. Edel'shteyn, G. V. Vinogradov, G. N. Kuznetsov, M. P. Volarovich, and A. V. Stepanov and geologists F. I. Vol'fson, V. A. Aprodov, N. I. Borodayevskiy, and Yu. S. Shikhin -- "On the Problems of Modeling Tectonic Phenomena."

paper presented at the First All-Union Conference on Tectonophysics, Moscow,  
29 Jan - 5 Feb 1957.

Sum 1957

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412010003-0

GRISHIN, A.S., inzh.; KONSTANTINOV, L.P.; KOROL'KO, Ye.I.; EDEL'SHTERN, Ye.I.;  
BYGBLES, R.M.

Destruction of brittle bodies. Trudy VNIIIBT no.1:131-133 '58.  
(MIRA 11:12)  
(Rocks)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412010003-0"

EDEL'SHTEYN, Ye. I. (Leningrad)

Using laminated models in solving the volumetric problem of  
photoelasticity. Izv. An SSSR. Otd. tekhn.nauk Mekh. i mashinostr.  
no. 1:30-38 Ja-F '61. (MIRA 14:2)  
(Photoelasticity)

EDEL'SHTEYN, Ye.I.

Senarmont's compensation method. Issl. po uprug. i plast. no.2;  
153-166 '63. (MIRA 16:8)  
(Photoelasticity)

EDEL'SHTEYN, Ye.I.; EYGELES, R.M.

Fracture of rocks under pressure. Issl. po uprug. i plast.  
no.2:132-152 '63. (MIRA 16:8)  
(Deformations (Mechanics)) (Boring)

*DEL'SATEYA, Y.V.*

**KDEL'SHTYN, Y.V.; TSEYTLIN, M.Ya.**

Urgent problems in the management of machine-tractor stations.  
Mekh. sil'. hosp. [8] no.12:19-20 D '57. (MIRA 10:12)

1. Ministerstvo sil'skogo gospodarstva URSR.  
(Machine-tractor stations)

Edel'shteyn-udianskiy, P.G.

TUCHKEVICH, T.M., kandidat ekonomicheskikh nauk (Khar'kov); ADAMENKO, N.V., kandidat ekonomicheskikh nauk, inzhener (Khar'kov); KRIMBUS, G.Kh., inzhener (Khar'kov); LEPHERSKIY, A.Ya., (Khar'kov); NAUMOV, G.K., kandidat ekonomicheskikh nauk (Khar'kov); SILAYEV, N.I., kandidat ekonomicheskikh nauk, dotsent (Khar'kov); USHAKOV, P.S., (Khar'kov); EDEL'SHTEYN-UDIANSKIY, P.G., kandidat ekonomicheskikh nauk (Khar'kov).

Qualities and defects of a manual on transportation economics ("Technical manual for railroad engineers." Volume 11, "Planning and accounting in railroad transportation." Reviewed by T.M. Tuchkevich and others.) Zhel.dor. transp. 38 no.8:91-93 Ag '56.

(MLRA 9:10)

(Railroads--Management)

~~EDEL'SKIY, F.~~

On the "Slava". Voen.znam. 30 no.12:10 D '54. (MLRA 8:?)

1. Predsedatel' oblastnogo komiteta organizatsii Vsesoyuznogo  
dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu.  
(Military education) (Whalers)

EDEL'SON, A. M. Engr.

The Application of Metal Spraying at the Stalingrad Tractor Plant im. F.E. Dzerzhinskiy

Vest Mash p. 30, Oct 51

EDEL'SON, A. M.

232T74

USSR/Metallurgy - Metallization

Jun 52

"Utilization of Direct Current in EM-3 Electric Spraying Gun," A. M. Edel'son, Engr

"Avtogen Delo" No 6, p 23

Discusses use of dc arc as heat source in elec sprayers for metal coating. Conversion to dc permitted increase in rate of wire feed to 2.30 m/min. This corresponds to 2.5 kg of 1.2-mm steel wire pulverized per hr instead of 1 kg in case of ac operation.

232T74

EDEL'SON, A. M.

Nov 52

USSR/Metallurgy - Metallization, Equipment

"On the Experience of Using an Electric Metal Spraying Gun of EM-6 Type," Engr A. M. Edel'son

Avtogen Delo, No 11, no 26-28

Describes machine-mounted gun designed at VNIIAvtogen for spraying large amounts of metal and discusses application of gun for reclamation of large worn parts, such as rotor of rubber-mixing machine. Repair of one journal required 20 kg of wire to be sprayed and was completed in 3 hrs. Analyzes performance of some gun parts.

266T53

EDEL'SON, A.M.

1. YEDEL'SON, A. M.
2. USSR (600)
4. Metal Spraying
7. Application of metal by means of spraying in making shafts for hydraulic machines. Vest. mash. 32 no. 7 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412010003-0

EDEL'SON, A. M.

EDEL'SON, A. M.; SHASHKOV, A. N., red.; ANTOSHINA, Ye. V., red.; MATVEYEVA, Ye. N., tekhn. red.; SOKOLOVA, T. F., tekhn. red.

[Operation of apparatuses for metallisation] Эксплуатация металлизационных аппаратов. Москва, Gos. nauchno-tekhn. izd-vo mashino-stroit. lit-ry, 1955. 106 p. (Moscow, Vsesoiuznyi nauchno-issledovatel'skiy institut avtogennoi obrabotki metallov. Rukovodящие материалы, no.5).

(MIRA 10:11)

(Metal spraying--Equipment and supplies)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412010003-0"

IRLIN, P.; HAMILSON, A.

Metal spraying in repairing and restoring machine parts.  
From,keep,no.10:34-37 0 '55. (MERA 9:4)  
(Metal spraying)

SOV/137-57-1-968

Translation from: Referativnyy zhurnal. Metallurgiya, 1957, Nr 1, p 125 (USSR)

AUTHORS: Irlin, P. I., Edel'son, A. M.

TITLE: Metallization in the Maintenance and Repair of Parts (Metallizatsiya  
pri remonte i vosstanovlenii detaley)

PERIODICAL: Inform-tekhn. sb. M-vo elekrotekhn. prom-sti SSSR, 1955, Nr  
76, pp 34-37

ABSTRACT: The 'Moskabel' plant has introduced a novel method for the repair  
of wheel running surfaces, rollers, shafts, and other parts by means  
of spray metallization; application of this method has almost en-  
tirely obviated any need for replacing worn parts with new ones. An  
electrometallizing equipment and the process procedure for metalli-  
zation are described.

M. M.

Card 1/1

*Edel'son, A. M.*  
AID P - 4292

Subject : USSR/Engineering

Card 1/1 Pub. 128 - 17/25

Authors : Edel'son, A. M., and L. S. Kartashov, Eng.

Title : Restoration of the drive shaft of a horizontal forging machine by metal-coating.

Periodical : Vest. mash., #2, p. 57-58, F 1956

Abstract : Restoration of worn-out metal on a drive shaft by a sprayed metal coating is described.

Institution : None

Submitted : No date

EDEL'SON, A.M., inshener.

Reconditioning turbine shafts by metal spraying. Elek.sta.27  
no.2:55 F '56. (MLRA 9:6)  
(Turbines--Maintenance and repair) (Metal spraying)

Edel'son, A.M.

USSR/ Metallurgy - Metal plating

Card 1/1 Pub. 128 - 23/33

Authors : Edel'son, A. M.

Title : The use of metal spray plating in repairing equipment

Periodical : Vest. mash. 36/1, 66-67, Jan 1956

Abstract : Metal plating of used wire stripping bands by means of the EM-3A spraying apparatus, is described. The plating was conducted on a turret lathe on which the apparatus was installed at a distance of 120 m from the sprayed component. The voltage utilized by the apparatus was 30 volts, and the air pressure 6 atm. The component was rotated 15 times a minute at a feed rate of 3 mm per revolution. Drawing.

Institution : .....

Submitted : .....

EDEL'SON, A.M., inzhener.

A three-wire head for metal spraying. Vest. mash. 36 no.8:  
64-66 '56. (MLRA 9:10)

(Metal spraying)

*EDEL'SON, A.M.*

ANTONOV, I.A., kand.tekhn.nauk; ANTOSHIN, Ye.V., inzh.; ASINOVSKAYA, G.A., inzh.; VASIL'YEV, K.V., kand.tekhn.nauk; GUZOV, S.G., inzh.; DEYKUN, V.K., inzh.; ZAITSEVA, V.P., inzh.; KAZHEKOV, P.P., inzh.; KARAN, Yu.B., inzh.; KOLTUNOV, P.S., kand.tekhn.nauk; KOROVIN, A.I., inzh.; KRZHECHKOVSKIY, A.K., inzh.; KUZMETSOVA, Ye.I., inzh.; MATVEYEV, N.N., tekhnik; MOROZOV, M.Ye., inzh.; NEKRASOV, Yu.I., inzh.; NECHAYEV, V.D., kand.tekhn.nauk; NINEBURG, A.K., kand.tekhn.nauk; SPEKTOR, O.Sh., inzh.; STRIZHEVSKIY, I.I., kand.khim.nauk; TESMENITSKIY, D.I., inzh.; KHROMOVA, TS.S., inzh.; TSEUNEL', A.K., Inzh.; SHASHKOV, A.N., kand.tekhn.nauk, dots.; SHLEICHNIK, M.M., inzh.; SHUKHMAN, D.Ya., inzh.; EDEL'SON, A.M., inzh.; VOLODIN, V.A., red.; UVAROVA, A.F., tekhn.red.

[Machines and apparatuses designed by the All-Union Institute of Autogenous Working of Metals] Mashiny i apparty konstruktsii VNIIAvtogen. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, 1957. 173 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avtogennoi obrabotki metallov, no.9)

(Gas welding and cutting--Equipment and supplies)